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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/698,713	10/31/2003	Yih-Jen Dennis Chen	K35A1314	1559

35219 7590 06/29/2005

WESTERN DIGITAL TECHNOLOGIES, INC.
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EXAMINER

DAVIS, DAVID DONALD

ART UNIT	PAPER NUMBER
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2652

DATE MAILED: 06/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/698,713

Applicant(s)

CHEN ET AL.

Examiner

David D. Davis

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10/31/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

2. Receipt is acknowledged of the Information Disclosure Statement (IDS) received October 31, 2003.

Specification

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 112

4. Claim 5 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In line 2 of claim 5, "the first direction" is indefinite because it lacks antecedent basis.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-8 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Perry (US 4,851,943). As per claims 1 and 11, Perry shows in figure 1 a head stack assembly (HSA) 25 for use in a disk drive 10 including a disk 1. Figure 3 shows a merge tool is used to merge the HSA 25 with the disk 1 during manufacturing of the disk 1 drive 10. As shown in figures 1 and 3, the HSA 25 includes the following:

- (a) at least one actuator arm 26;
- (b) a suspension 22 connected to a distal end of the actuator arm 26;
- (c) a head 20 connected to a distal end of the suspension 22 with the suspension 22 for biasing the head 20 toward the disk 1; and
- (d) a multi-level shipping comb 100 attached to the actuator arm 26.

The multi-level shipping comb 100 includes at least one finger 120 & 125 for maintaining the suspension 22 in a near optimal vertical position. The finger 120 & 125 includes a first surface and a second surface with the second surface being raised relative to the first surface.

During shipping of the HSA 25, the first surface of the finger 120 & 125 contacts the suspension 22 to protect against overstressing the suspension 22. During manufacture of the disk drive 10, the shipping comb 100 is actuated so that the second surface contacts the suspension 22 thereby bending the suspension 22 in a vertical direction to facilitate the insertion of the merge tool.

As per claim 2, Perry shows in figures 2 and 3 the following:

- (a) the actuator arm 26 including an aperture; and

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(b) the shipping comb 100 including a pin 112 and a latching member.

The shipping comb 100 is attached to the actuator arm 26 by inserting the pin 112 through the aperture of the actuator arm 26; and rotating the shipping comb 100 in a first direction until the latching member latches onto the side of the actuator arm and the first surface of the finger 120 & 125 contacts the suspension 22. See column 5, lines 26-60.

As per claims 3 and 12, Perry shows in figure 4 the shipping comb 100 being actuated by rotating the shipping comb 100 so that the second surface contacts the suspension 22 thereby bending the suspension 22 in a vertical direction to facilitate the insertion of the merge tool. As per claim 4, Perry show in figure 4 the shipping comb 100 being actuated by rotating the shipping comb 100 in the first direction. As per claim 5, Perry shows in figure 4 the shipping comb 100 is actuated by rotating the shipping comb 100 in a second direction opposite a first direction. See column 6, lines 14-26 of Perry.

As per claims 6 and 13, Perry shows in figure 10, for example the following:

- (a) the second surface comprises a beveled surface with respect to the first surface; and
- (b) the suspension 22 slides over the beveled surface when the shipping comb 100 is actuated.

As per claim 7, Perry discloses in column 6, lines 14-26 that after the merge tool is inserted, the shipping comb 100 is detached from the actuator arm 26 by rotating the shipping comb 100 in a second direction opposite the first direction. As per claims 8 and 14, Perry discloses in column 6, lines 14-26 that after the merge tool is inserted, the shipping comb 100 is detached from the actuator arm 26 causing the suspension 22 to react vertically and engage the merge tool.

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As per claim 10, Perry shows in figure 2 for example,

(a) the finger 120 & 125 of the shipping comb 100 includes an arcuate shape such that the first and second surfaces comprise an arcuate shape; and

(b) the second surface comprises a radius larger than the a radius of the first surface.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 9 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Perry (US 4,851,943). Perry discloses the claimed invention. See description, supra. However, Perry is silent as to a coating on the finger to reduce friction.

Official notice is taken of the fact that coatings to reduce friction are notoriously old and well known in the art.

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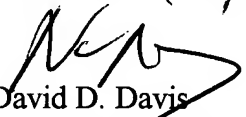
It would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide the finger of Perry with a coating as taught in the art. The rationale is as follows: one of ordinary skill in the art at the time the invention was made would have been motivated to provide a coating (e.g. Teflon) on a finger, which is well within the purview of a skilled artisan and absent an unobvious result, so as to reduce friction.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David D. Davis whose telephone number is 571-272-7572. The examiner can normally be reached on Monday thru Friday between 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa T. Nguyen can be reached on 571-272-7579. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


David D. Davis
Primary Examiner
Art Unit 2652

ddd